

Parks Township Shallow Land Disposal Area



STATUS REPORT November 2, 2010



**US Army Corps
of Engineers ®**
Pittsburgh District

SUMMARY

The Parks Township Shallow Land Disposal Area (SLDA) site, located in Armstrong County, encompasses 44 acres of private land presently owned by BWX Technologies. The Nuclear Materials and Equipment Corporation (NUMEC), which



Steel frames for the Material Handling Building.

was a predecessor of BWX Technologies, conducted disposal of radioactive waste materials in accordance with the Atomic Energy Commission (predecessor to the present Nuclear Regulatory Commission) regulations. Currently, BWX Technologies is licensed by the Nuclear Regulatory Commission to properly maintain the site to ensure the protection of workers and the public.

The SLDA site consists of ten trenches containing contaminated soil and other waste materials. The estimated quantity of contaminated waste material in the trenches is approximately 24,300 cubic yards. This equates to the area of a football field twelve feet deep. Additional radiologically contaminated surface materials identified outside of the trenches will also be removed.

Uranium, thorium, americium and plutonium contaminated waste has been identified. Uranium and thorium contaminated waste material consisting of process residue, equipment, scrap and trash from the nearby Apollo nuclear fuel fabrication facility were disposed of within the trenches at the SLDA site between 1961 and 1970.

The uranium in the trenches is present at various levels of enrichment. Americium and plutonium, whose presence is attributed to storage of equipment used in the adjoining Parks Facility, has been detected in surface soils adjacent to a single trench.



Randall Brozenick and Vince Cappel of the Armstrong County Department of Public Safety meet with Corps of Engineers personnel in September.

Corps meets with Armstrong Co. Officials

The U.S. Army Corps of Engineers held an Incident Preparedness Meeting with the Armstrong County Public Safety Office on September 28, 2010. This meeting took place at the SLDA project site. The Armstrong County attendees were Director Randall Brozenick and HAZMAT Coordinator Vincent Cappel. The outline of the meeting included site orientation for the Armstrong County officials, HAZMAT material orientation, incident management plan development and community outreach. In October, the Corps met with Emergency First Responders (police, fire, EMS and HAZMAT) to discuss site hazards, risks, mitigation and response capabilities.

CURRENT STATUS

Within the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) process, the Remedial Investigation, Feasibility Study, Proposed Plan, and Record of Decision (ROD) have all been completed. The ROD, approved in September 2007, formally provides the clean-up process to be used at the site.

In August 2003, April 2004, January 2007 and April 2010, the Corps held public information sessions to present and discuss the Remedial Investigation, the Feasibility Study, and the Proposed Clean-up Plan.

The Feasibility Study identified and provided an evaluation of potential alternatives to address the contamination at the site; the Proposed Plan provided the alternative that is preferred based on the results of that evaluation for the Parks Township SLDA site.

As a result of input received from the public at these information sessions, the recommendations were reviewed, further evaluated, and included in the ROD.

The recommendation from the ROD is to excavate radiologically contaminated material and transport the material out of state to an approved disposal facility. The ROD is available for viewing at the Apollo Public Library and the Corps' Pittsburgh District Office.

The Corps is now preparing a detailed design for the approved process. These activities and subsequent work at the site are steps in the site investigation and clean-up process outlined in the CERCLA. The project Remedial Design was completed in May 2010.

Remedial Action, the on-site removal effort, begins with the preparation of the infrastructure necessary to process the waste material. This work is on-going and will be completed before excavation begins.

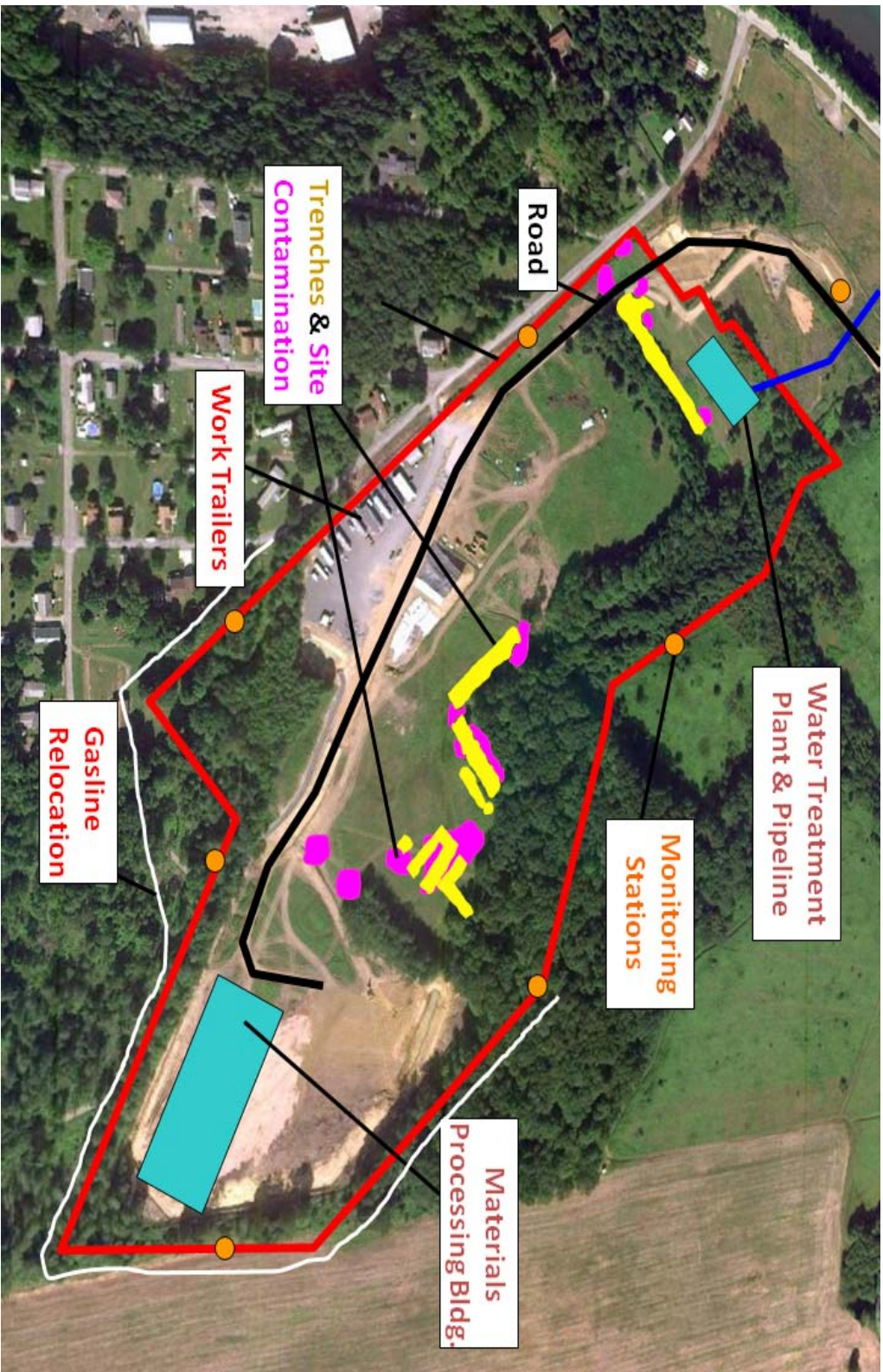
Excavation of the trenches is not expected to occur until Spring 2011. Following Remedial Action, the Project Closeout phase will conclude all efforts.

There is no work being done in the contaminated area at this time.

MILESTONES

Spring - Fall 2010

- ☒ Meet with BWXT, PA Department of Environmental Protection and the Nuclear Regulatory Commission to coordinate the excavation and removal of chemically contaminated material.
- ☒ Meet with Armstrong County Public Safety Officials for on-going development of our Joint Incident Response Plan.
- ☒ Meet with Kiskimere residents.
- ☒ Build and pave site road to avoid future use of Kiskimere Road.
- ☒ Build sediment basins to capture runoff and prevent erosion during road construction.
- ☒ Construct material handling building concrete pad and begin assembly of steel frame.
- ☒ Grade and pave final status survey pad where non-contaminated soil from trench excavation will be tested to verify the lack of contamination prior to being used as backfill for trenches.
- ☒ Create Status Report for public information.
- ☒ Provide SLDA site visit for local first responders.
- ☒ Start natural gasline relocation.
- ☒ Conduct Fall meeting with public.
- ☒ Develop Community Coordination Outreach Plan.
- ☐ Update website to include Frequently Asked Questions.
- ☐ Complete infrastructure (Material Handling Building, etc.)



Road

Trenches & Site
Contamination

Work Trailers

Water Treatment
Plant & Pipeline

Monitoring
Stations

Gasline
Relocation

Materials
Processing Bldg.

FAQs & Responses

What is the risk of radiological contamination to nearby residents?

The risk is low. Several measures will be in place to further reduce risk. 1) Airborne contamination will be controlled by wetting the work surfaces to ensure that contaminated particles do not pose a threat. 2) The excavation will be slow, thorough and deliberate. Material will be removed in one foot lifts to limit what is exposed. The amount of radiological contamination will be measured and known before it is excavated. 3) The air concentration around the dig is measured and monitored for worker and community safety. 4) Air inside the material handling building is controlled and treated before it is emitted. 5) Groundwater will be monitored with in-situ sensors continuously and sampled no less than monthly.

What happens if you do find unexpected material in the trenches?

Each lift will be thoroughly scanned for radioactivity before excavation. During excavation, teams will continue to scan for radioactivity and for chemical compounds. If unexpected materials are detected at levels that are considered a threat to workers or community safety, work will stop, and engineering safety controls will be implemented. The material will be characterized and disposed of in a safe manner.

Could finding unexpected material extend the project duration?

Yes. Public safety is paramount. We will take our time and remove the material in a safe manner. If unexpected material is discovered that may pose a risk, excavation will stop until the material is characterized and appropriate safety controls are in place.

In case of an emergency, what is the plan to notify and evacuate residents, if necessary?

Public safety is the principal factor during this project. The Corps and our contract partners are working with the local communities' first responders (police, EMS, fire and rescue), Armstrong County Emergency Management officials, Region 13 Emergency Management Team and the Pennsylvania Emergency Management Agency (PEMA) to refine our Incident Response Plan. The plan will also be rehearsed and exercised with each of our response team partners listed above in addition to associated contracted response resources. Additionally, we are actively analyzing various options for notifying residents of an incident at the site. We continue to meet with Armstrong County Emergency Management officials to refine our Incident Response Plan. We are also gathering first responders onsite to provide awareness and preparedness training. Once the plan is finalized, we will work and rehearse the plan with the first responders, emergency managers and contracted HAZMAT resources. Various options for notifying residents of an incident at the site are being considered.

Why clean up the site at all?

Radiological contamination in the trenches may pose a future threat to human health and the environment if left unaddressed.

When will the removal of materials be completed?

We expect the removal to take five to 10 years. The removal of materials is largely impacted by the type and quantity of materials encountered.

How will we know if something goes wrong? And how will we know what to do?

The Corps and local responding organizations are exploring notification technologies to inform residents of an incident at the site; the selected technology will be shared with residents and put in place prior to removal of contaminated material. This notification system will be tested and exercised to ensure communication with residents and responders is effective.

What were the levels of contamination in the site's surface soils?

Our investigation of the site indicated that isolated areas over and around the trenches had levels that are slightly above the natural background. We will remediate these isolated areas. These levels, while elevated above background, do not pose a risk to human health or the environment.

Are you removing all of the contaminated material?

No. Under the law, the Corps is only authorized to remove radioactive waste and other chemical material comingled with radioactive waste above a certain threshold. However, we're working closely with federal and state agencies and the site owner to facilitate the removal of chemical materials from the site.

What is the Corps doing to ensure contaminants don't runoff onto adjacent properties?

The Corps has robust erosion control measures and a water collection system in place to contain sediment and water from exiting the excavation sites. In the unlikely event that contamination is discovered outside the site boundaries, the Corps will stop work, and assess and remedy the situation.

How will the Corps prevent contaminated water from leaving the site?

Waste water generated during the remediation and storm water run-off within the contaminated areas will be collected and treated in accordance with applicable standards at an on-site water treatment plant.

Has the Corps considered the impact of remediation on the stability of the underground mines?

The stability of the mines has been evaluated by professional geologists who determined that the mines will not be compromised by excavation and on-site activities.

What is the Corps doing to prevent the flow of contaminated water through the mines?

Waste water generated during the remediation and storm water within the contaminated areas will be collected and will not flow through the underground mines.

What is the future plan for the land after clean-up?

The site will be cleaned up to agricultural usage standards with respect to radiological contamination. The future use is determined by the site owner.



Trusses are put in place for the Material Handling Building.



Storage tanks for the Water Treatment Plant.



Construction begins on Material Handling Building.

Frames for a water storage tank at the Water Treatment facility.



Vince Cappelletti from the Armstrong County Dept. of Public Safety talks with Marc Graham, a Corps representative.

Have More Questions?

visit:
[www.lrp.usace.army.mil/
fusrap/slida.htm](http://www.lrp.usace.army.mil/fusrap/slida.htm)

and email your questions to
us!



Click Here



The newly paved project road.

For more information, please contact the following:

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Project Website: www.lrp.usace.army.mil/fusrap/slida.htm